

**(19) World Intellectual Property
Organization
International Bureau**



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/028459 A1

- (51) **International Patent Classification⁷:** C07D 295/20.
281/16

(21) **International Application Number:**
PCT/FI2004/000561

(22) **International Filing Date:**
23 September 2004 (23.09.2004)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
60/504,982 23 September 2003 (23.09.2003) US

(71) **Applicant (for all designated States except US):**
FERMION OY [FI/FI]; Koivu-Mankkaan tie 6 A,
FI-02200 Espoo (FI).

(72) **Inventors; and**

(75) **Inventors/Applicants (for US only):** HILDEN, Leif
[FI/FI]; Mikael Lybeckintie 10, FI-02700 Kauniainen (FI).
GRUMANN, Arne [DE/FI]; Siestankuja 13 A, FI-02700
Kauniainen (FI). HUHTA, Soini [FI/FI]; Nuotiotie 11,
FI-02600 Espoo (FI). RUMMAKKO, Petteri [FI/FI];
Hämäläistentie 11 C 7, FI-02780 Espoo (FI).

(74) **Agent:** ORION CORPORATION ORION PHARMA;
Legal Affairs and Intellectual Property Rights, P.O. Box 65,
FI-02101 Espoo (FI).

(81) **Designated States (unless otherwise indicated, for every
kind of national protection available):** AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) **Designated States (unless otherwise indicated, for every
kind of regional protection available):** ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

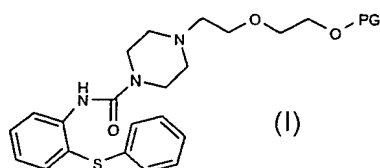
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PREPARATION METHOD FOR QUETIAPINE



(57) Abstract: The present invention discloses a process for the preparation of quetiapine, which comprises the ring closure and deprotection of a compound of the formula (I), as well as novel intermediates in the process.

WO 2005/028459 A1

BEST AVAILABLE COPY